

## USAGE RESTRICTIONS

Operation is not guaranteed when installed in different equipment than the specified one.

THE USAGE INSTRUCTIONS OF THIS DEVICE SHALL BE HANDED TO THE USER, WHO WILL HAVE THEM IN THEIR POSSESSION. IF THEY ARE MISLAID, THE USER CAN ASK FOR A COPY OR DOWNLOAD IT DIRECTLY FROM WWW.SMINN.COM

The manufacturer reserves the right to change the specifications of these systems as well as this manual without prior warning. The equipment must be manipulated only by specialized and/or skilled personnel.

## WARRANTY

This product has undergone a complete TEST during its manufacturing process that guarantees its reliability and proper operation. The manufacturer provides 36 months of warranty to the product from the date printed in the product and against any anomaly that it may present in its appearance or operation.

Any damage caused by third parties, natural causes (flooding, fire, lightning, etc), arising from improper handling or installation, vandalism or any other cause non attributable to the manufacturer will void the warranty. The warranty only covers repairs or replacement of the damaged device.

Any expenses derived from assembling, travelling, transport, natural wear of parts, etc., and, in general, any expenses that are not part of the repairs or replacement of the damaged element of the system are excluded.

The installer/provider will ask the manufacturer for a RMA number or authorization for transport of the system in warranty. Without this previous requisite, the manufacturer will not be able neither to process nor provide warranty service.

## WARNING

This product must be used in installations which has been conceived for, considering any other as improper use. The packaging must not be dumped in the environment. Keep products, packaging, wrapping, documentation, etc., out of the reach of children. Follow the current local, national or European regulations. The information contained in this document may have some mistakes that will be corrected in future editions. The manufacturer reserves the right to modify the contents of this document or the product without any prior warning.

## WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In accordance with the European Directive 2002/96/EC about waste electrical and electronic equipment (WEEE), the presence of this symbol (see symbol at the bottom of this text) in the product or in the packaging, means that this article shall not be disposed in local non-classified waste streams. It is the user's responsibility to dispose this product taking it to a collection point designed for waste recycling of electrical and electronic devices. The separate collection of this product helps optimize the waste sorting and recycling of any recyclable material and also decreases the impact on health and the environment. For more information about the correct wasting of this product, please contact the local authority or the distributor where you acquired this product.



## CE DECLARATION OF CONFORMITY

The company ELSON ELECTRÓNICA, S.A  
Pol. Torrelarragoiti, P6-A3  
48170 Zamudio - Bizkaia (SPAIN)

Declares

The product: BASE STATION CONTROLLER BXM-340

Manufactures by ELSON ELECTRÓNICA, S.A.

Under the trademark: **SMINN**

For use in: Residential, Commercial or light industry environments.

This device meets the provisions as long as its usage is compliant to what was envisaged, having applied the following regulations:

2014/53/EU directive - Radio devices

2014/35/EU directive - Low voltage

2011/65/EU directive - RoHs

2012/19/EU directive - WEEE

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# BOX M 340

## FOUR CHANNEL RECEIVER + PLUS BASE STATION

### INSTRUCTION MANUAL



**SMINN**

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## DESCRIPTION

SMINN BOX M base-station receivers are developed with state-of-the-art electronics. They offer a high degree of reliability and operational safety.

Equipped with a robust RS 485 communications bus that allows more versatility in installation and makes them more immune to interference.

They are designed to provide the activation and movement order to SMINN control panels, alarm, access control, home automation, etc. They are suitable for industrial, commercial and/or residential environments.

A new secure communication and encryption system provides these devices with the possibility of managing installations by means of invitations and replacements.

The equipment has been built using high quality materials and components and the latest technology. The equipment complies with current standards for use in residential, commercial and light industrial installations.



## OPERATION

Upon receiving a Key-Tag key code or SMINN transmitter, the receiver + base-station control unit checks whether it has been registered in the corresponding memory. If it has been registered, it activates the relay, as long as it is not blocked.

## ERASING THE MEMORY

It is only possible to erase the memory using the SMINN programming console and knowing its PIN. In this way we avoid accidental or malicious erasure.

## BLOCKING A CODE IN MEMORY

A code cannot be deleted from the memory but it can be blocked so that it is not operative. It is only possible to block codes in the memory with the SMINN programming console and knowing the PIN.

## MANUAL PROGRAMMING

The following is a step-by-step guide on how to program the receiver panel manually. The first code to be recorded must always be done following all the indicated steps.

### Transmitters

1. Press the right PROG button on the MEMO RADIO (fig.1 - item 4) and keep it pressed.
2. Press the button of the channel of the transmitter that you want to record, which will be automatically assigned to the corresponding relay. On receiving the code and channel sent by the transmitter, the receiver records it in the memory and emits TWO consecutive validation beeps.
3. Release the programming button on the control box.

Repeat this process for as many transmitter codes as you want to record in the memory manually, using the same channel as the first recording. Pressing another channel will have no effect.

### Tags

1. Press the left PROG push-button and hold it down for about 5 seconds until the panel emits a long beep to indicate that it is in programming mode.
2. Bring the key to be recorded close to a connected reader. On receiving the code sent by the reader, the receiver records it in the memory and emits TWO consecutive validation beeps. For each new key read, the programming is left open for 10 seconds.
3. After 10 seconds from the last recording, the memory is closed.

Holding a registered Key - Tag in the reader for 10 seconds opens the memory, allowing new keys to be recorded, just by bringing them close to the reader, without the need to press the PROG button again.

## PROGRAMMING BY INVITATION

Depending on the security level configured in the receiver's memory, it is possible to program (register) codes automatically.

Security level 1 (basic) - Knowing the PIN, a transmitter or key can be recorded with the SMINN programming console, which will be ready to operate and will be self-programmed in the memory.

Security level 2 (medium) - Only a transmitter/key that is already recorded in the memory can clone or give permission for self-programming to transmitters that have the same PIN. Keys can only be recorded manually or by opening the memory.

Security level 3 (high) - Transmitters or keys can only be programmed manually and with elements that have the same PIN as the installation.

## CODE REPLACEMENT IN CASE OF LOSS

This function allows you to replace a transmitter or key code in the memory with a new one in the case of loss. It is only possible to replace a code using the SMINN programming console and knowing the PIN of the installation and the code number of the lost element.

## RELAY MODES (TAG KEYS)

The device has 4 jumpers that allow the configuration of the relays activation using tag keys. The positions M1 and M2 make the relay to be activated depend on the direction of the reader that reads the key.

Position M3 makes the relays to be activated dependent on the configuration set in memory using a reservation installation in SMARTOOL.

Position M4 is used in conjunction with position M1 or M2 and allows only the relay indicated by the reader address to be activated as long as it is allowed by the configuration set in memory using a reservation installation in SMARTOOL.

	Relay 1 directions	Relay 2 directions	Relay 3 directions	Relay 4 directions
<b>M1</b>	1 and 2	3 and 4	5 and 6	7 and 8
<b>M2</b>	1, 2 and 3	4, 5 and 6	7	8

## INSTALLATION

The SMINN base-station panel is prepared to be easily mounted on the wall using the plugs and screws supplied. Before proceeding to connect or manipulate the equipment, the power switch or differential must be disconnected.

The installation must be carried out by specialised or trained personnel using cable of sufficient cross-section and properly protected. It must be taken into account that equipment permanently connected to the grid must have an easily accessible connection device (e.g. a circuit breaker). Attention shall be paid to the wiring following the indications on the printed circuit board.

Make sure that the memory is inserted and properly configured. After programming and checking the equipment, place the front cover and fasten it with the supplied screws.

**Note:** Reinforced concrete and metal parts or other receiving equipment greatly attenuate the RF signal, therefore installation near these elements shall be avoided.

## WIRING

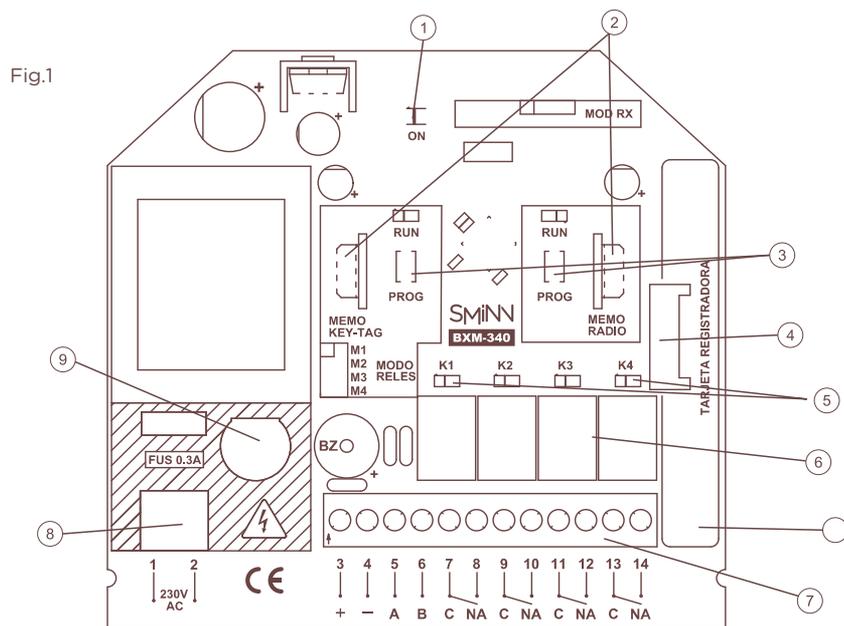
Wiring is made on the terminal blocks in a simple way. Wiring to the readers is made with only 4 wires on terminals 3 to 6, 2 wires for the power supply and 2 for the RS485 data BUS.

Term	Function	Note
1, 2	Power input	230V AC power input
3, 4	Power output	Power output for readers/keypads
5, 6	Communication BUS	Connect peripherals with RS485 BUS
7-14	Activation relays	Relays for channels 1, 2, 3 and 4

The RS485 BUS is operated in Half/Duplex mode with two A and B wires. All BUS elements must have the same connection. The A wires with the A wires and the B wires with the B wires (they must not be interchanged).

## TECHNICAL CHARACTERISTICS

BOX M 340	230VAC
Power supply	Depending on model
Energy consumption	< 10 W
Communication	BUS RS485 Half / Duplex
Encryption	High security encryption
Code memorization	Plug-in memory of 250 codes
Memory expansion	500 / 1000 / 2000
Sensibility	< -115 dBm
Radio type	Superheterodyne
Codification	Crypto/Rolling high security
Antenna	Internal helix
Wiring	4-wire, recommended shielded cable CAT5
Peripherals max. capacity	2 RD356 readers (Up to 8 with an external power supply)
Maximum distanc	> 200m
Watertight	IP54 - (IP65 with cable glands)
Operating temperature	-20°C / +85°C
Dimension s	185 x 145 x 65 mm
Casing	ABS
Optional cards	TREG radio card



### COMPONENTES

1. ON led
2. Memories
3. PROG button
4. TREG socket
5. Relays LEDs
6. Relays
7. BUS and Relays terminal block
8. 230VAC power connector
9. 0.3A fuse

## WIRING DIAGRAM

